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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 10/075,839
Filing Date: February 13, 2002
Appellant(s): BRIAND ET AL.

G. Eriksen
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 8/11/05 appealing from the Office action

mailed 4/25/05.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| 6,462,791 | ZHU | 10-2002 |
| 4,864,398 | AVIS ET AL | 9-1989 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3, 8, 9, and 11-14 are rejected under 35 U.S.C. 102(e) as being

anticipated by Zhu (6,462,791) for the same reasons as set forth in Section 6 of the last

office action, dated 12/8/04.

Zhu, in Figures 6 and 8, discloses the same frequency converter 145, video

coder 110, and method of detecting the reliability of a field of movement vectors of one

image in a sequence of video images as specified in claims 1-3, 8, 9, and 11-14 of the

present invention, characterized in that it includes a stage of calculating a stability

parameter for the field, on the basis of a comparison S330, over two successive images

(i.e. MV), of the number of occurrences of the majority vectors (e.g. majority voting

process) of the movement-vectors fields of each of these images (Fig. 5), a field being

defined as stable if the variation in the number of occurrences lies within a predefined

bracket (THRESHOLD), and a stage of deciding on reliability S570 on the basis of this

stability parameter.

With respect to claims 2, 3, and 12, Zhu also includes a stage of calculating

disturbance parameter for the field, on the basis a comparison S530, over two

successive images, of the number of occurrences of the movement vector

corresponding to the majority vector of one of the two images, a field being defined as

not disturbed if the variation in the number of occurrences lies within a predefined

bracket T, and in that the decision stage is also based on this disturbance parameter;

and if the variation in the number of occurrences of the zero vector S540 in the

movement-vectors field, between successive images, lies within a predefined bracket, and in that the decision stage is also based on this disturbance parameter.

With respect to claims 8 and 9, Zhu discloses that the occurrences of the vectors are relative to the value of the horizontal component (x) of these vectors; and the decision stage also takes into account a parameter for the detection of saturation of the movement-vectors field (Fig. 5, vector field orientation).

Claims 4-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhu in view of Avis et al (4,864,398) for the same reasons as set forth in Section 9 of the last office action, dated 12/8/04.

Although Zhu discloses detecting movement vectors based on a plurality of images, it is noted Zhu differs from the present invention in that it fails to particularly disclose calculating the vectors in a time-domain for detection of a change of scene in the video sequence as specified in claims 4-7 and 10. Avis et al however, in Figures 12-15, teaches the concept of such well known stability state on the basis of the stability parameters for this image and of P-1 preceding images, a state being declared as stable or disturbed (e.g. Fig. 13) if a minimum number of stable fields is detected among these P images, P and Q being integers such as 2 and 1, and in that the decision stage is also based on this stability state (Fig. 15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having both the references of Zhu and Avis et al before him/her, to exploit the common time-domain stability calculation technique as taught by

Avis et al in the vector reliability detection method of Zhu in order to provide smooth and predictable motion vectors, so improving the overall subjective effect in the final picture.

(10) Response to Argument

Although appellant agrees Figure 5 of Zhu shows a field of motion vectors, appellant asserts on page 4 of the Brief that Figure 5 fails to disclose the field is "over two successive images." However, motion vectors are determined from two successive images in order to provide offset information during image compression (see col. 1, lines 24-55, in particular, lines 49-51).

Appellant asserts on pages 4, 5, and 8 of the Brief that Zhu fails to disclose "the number of occurrences of the majority vectors." However, element 225 of Zhu counts the number of the majority vectors in Figure 5 (col. 5, lines 9-55). By using a majority voting process, 16 vectors in Figure 5 are voted as the majority (i.e. arrows in the bottom region) whereas 9 of the other vectors are ignored (i.e. dots in the bottom region). Therefore, majority voter 225 determines the majority vector of each region based on the number of occurrences of the majority vectors.

Appellant also asserts on page 5 of the Brief that Zhu fails to disclose a stability parameter. However, according to appellant's own specification (p. 9, lines 20-21), the so called stability parameter is merely a binary setting of either a "0" or a "1". Similarly, column 5, lines 18-20 of Zhu discloses calculating such a stability parameter wherein either a value of "0" or "V_{best}" is being set on the basis of a comparison.

In response to appellant's argument on pages 5 and 8 of the Brief that the references fail to show certain features of applicant's invention, it is noted that the

features upon which appellant relies (i.e., page 9, lines 24-35 of appellant's

specification) are not recited in the rejected claim(s). Although the claims are

interpreted in light of the specification, limitations from the specification are not read into

the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to appellant's argument on page 8 of the Brief that there is no

suggestion to combine the references, the examiner recognizes that obviousness can

only be established by combining or modifying the teachings of the prior art to produce

the claimed invention where there is some teaching, suggestion, or motivation to do so

found either in the references themselves or in the knowledge generally available to one

of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir.

1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case,

even if the suggestion for combination is not particularly specified in either Zhu or Avis

et al, the question in the test for combining references in a section 103 rejection is not

solely relied on what the individual reference expressly teaches. In re McLaughlin, 170

USPQ 209-213:

> "It should be too well settled now to require citation or
> discussion that the test for combining references is not what
> the individual references themselves suggest but rather what
> the combination of disclosures taken as a whole would
> suggest to one of ordinary skill in the art. Any judgment on
> obviousness is in a sense necessarily a reconstruction
> based upon hindsight reasoning, but so long as it takes into
> account only knowledge which was within the level of
> ordinary skill at the time the claimed invention was made and
> does not include knowledge gleaned only from applicant's
> disclosure, such a reconstruction is proper."

Therefore, even though neither Zhu nor Avis et al taken singularly for claims 4-7 and 10

suggests the combination as claimed, the combination of Zhu and Avis et al taken as a

whole would have been obvious to one of ordinary skill in the art as previously set forth

in the last office action.

In conclusion, Examiner submits that claims are to be given their broadest

reasonable interpretation during prosecution, and the scope of a claim cannot be

narrowed by reading disclosed limitations such as those equivalent features on page 9

of the specification into the claim. See In re Morris, 127 F.3d 1048, 1054, 44 USPQ2D

1023, 1027 (Fed. Cir. 1997); In re Zletz, 893 F.2d 319, 321, 13 USPQ2D 1320, 1322

(Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404, 162 USPQ 541, 550 (CCPA 1969).

In addition, the law of anticipation does not require that Zhu "teach" what an appellant's

disclosure teaches. Since Zhu is properly "prior art," it is only necessary that the claims

"read on" something disclosed in Zhu, i.e., all limitations of the claim are found in Zhu,

or "fully met" by it. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781,

789 (Fed. Cir. 1983).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

(12) Conclusion

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Young Lee

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